

ATTORNEY DOCKET NO.
11321-P079WOUS



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Christopher A. Dyke et al.

Serial No.: 10/573,902

Filing Date: October 28, 2004

Art Unit: 1754

Confirmation No.: 2103

Examiner: N/Y/A

Title: *Thermal Treatment of Functionalized Carbon Nanotubes in Solution For Defunctionalization*

Mail Stop: Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Applicant hereby submits the following references in accordance with 37 C.F.R. §§ 1.56, 1.97 and 1.98. Foreign references cited in the attached PTO/SB/08A are enclosed for the examiner's reference and copies of the references cited in the attached PTO/SB/08B are also enclosed. Furthermore, pursuant to 37 C.F.R. § 1.97(g) and (h), no representation is made that this is material to patentability of the present application or that a search has been made.

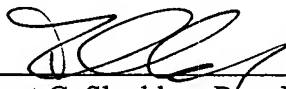
Applicant hereby submits that claims of Applicant's referenced patent application are patentably distinguishable from these references.

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Applicant does not believe that any fees are due at this time; however, the Director of Patents and Trademarks is hereby authorized to charge any fees relating to this Information Disclosure Statement under 37 CFR § 1.17 to Deposit Account No. 23-2426 of WINSTEAD PC (referencing matter 11321-P079WOUS).

Respectfully submitted,

Date: 8/21/07



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CERTIFICATE OF MAILING

I hereby certify that the attached *Information Disclosure Statement* and cited art are being deposited with the USPS, with sufficient postage as first class mail, addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this the 21st day of August, 2007.

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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	6
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Complete if Known

Application Number	10/573,902
Filing Date	October 28, 2004
First Named Inventor	Christopher A. Dyke
Art Unit	1754
Examiner Name	Unknown
Attorney Docket Number	11321-P079WOUS

U. S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

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Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ *Number ⁴ *Kind Code ⁵ (if known)				
	3	WO 02/060812	08/08/02	Rice University		
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		Examiner Name	Unknown		
Sheet	2	of	6	Attorney Docket Number	11321-P079WOUS

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	5	IJIMA, "Helical microtubules of graphitic carbon", 354 Nature (1991), pgs. 56-58	
	6	IJIMA ET AL., "Single-shell carbon nanotubes of 1-nm diameter", 363 Nature (1993), pgs. 603-605	
	7	BETHUNE ET AL., "Cobalt-catalysed growth of carbon nanotubes with single-atomic-layer walls", 363 Nature (1993), pgs. 605-607	
	8	BAUGHMAN ET AL., "Carbon Nanotubes - the Route Toward Applications", 297 Science (2002), pgs. 787-792	
	9	EBBESEN, "Carbon Nanotubes", 24 Annu. Rev. Mater. Sci. (1994), pgs. 235-264	
	10	THESS ET AL., "Crystalline Ropes of Metallic Nanotubes", 273 Science (1996), pgs. 483-487	
	11	VANDER WAL ET AL., "Flame synthesis of Fe catalyzed single-walled carbon nanotubes and Ni catalyzed nanofibers...", 349 Chem. Phys. Lett. (2001), pgs. 178-184	
	12	HAFNER ET AL., "Catalytic growth of single-wall carbon nanotubes from metal particles", 96 Chem. Phys. Lett. (1998), pgs. 195-202	
	13	Cheng et al., "Bulk morphology and diameter distribution of single-walled carbon nanotubes synthesized by ..." 289 Chem. Phys. Lett. (1998), pgs. 602-610;	
	14	Nikolaev et al., "Gas-phase catalytic growth of single-walled carbon nanotubes from carbon monoxide", 313 Chem. Phys. Lett. (1999), pgs. 91-97	

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Sheet	3	of	6	Attorney Docket Number	11321-P079WOUS

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	15	LIU ET AL., "Fullerene Pipes", 280 Science (1998), pgs. 1253-1256	
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	18	HOLZINGER ET AL., "Sidewall Functionalization of carbon Nanotubes", 40 Angew. Chem. Int. Ed. (2001), pgs. 4002-4005	
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	23	O'CONNELL ET AL., "Band Gap Fluorescence from Individual Single-Walled Carbon Nanotubes", 297 Science (2002), pgs. 593-596	
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	25	BRONIKOWSKI ET AL., "Gas-phase production of carbon single-walled nanotubes from carbon monoxide..." 19 J. Vac. Sci.Tech. (2001), pgs. 1800-1805	
	26	SAITO ET AL., Physical Properties of Carbon Nanotubes, Imperial College Press, London (1998)	
	27	AVOURIS, "Molecular Electronics with Carbon Nanotubes", 35 Acc. Chem. Res. (2002), pgs. 1026-1034	
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	35	CHIANG ET AL., "Purification and Characterization of Single-Wall Carbon Nanotubes", 105 J. Phys. Chem. B (2001), pgs. 1157-1161	
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	37	FARKAS ET AL., "Length sorting cut single wall carbon nanotubes by high performance..", 363 Chem. Phys. Lett. (2002), pgs. 111-116	
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	41	DYKE ET AL., "Diazonium-Based Functionalization of Carbon Nanotubes: XPS and GC-MS Analysis..", SynLett (2004), pgs. 155-160	
	42	DYKE ET AL., "Overcoming the Insolubility of Carbon Nanotubes Through High Degrees of Sidewall Functionalization", 10 Chem. Eur. J. (2004), pgs. 812-817	
	43	HUDSON ET AL., "Water-Soluble, Exfoliated, Nonroping Single-Wall Carbon Nanotubes", 126 J. Am. Chem. Soc. (2004), pgs. 11158-11159	
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	45	Sun et al., "Functionalized carbon nanotubes: properties and applications", 35 Acc. Chem. Res. (2002), pgs. 1096-1104	
	46	Fu et al., "Defunctionalized carbon nanotubes", 1(8) Nano Lett. (2001), pgs. 439-441	

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